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09/753,328	12/29/2000	Shane M. Tulloch	046700-5005-01	8416

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EXAMINER

PATEL, JAGDISH

ART UNIT	PAPER NUMBER
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3624

DATE MAILED: 12/16/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/753,328

Applicant(s)

TULLOCH ET AL.

Examiner

JAGDISH PATEL

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 29 December 0200.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-25 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-25 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

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**DETAILED ACTION**

***Specification***

1. The abstract of the disclosure is objected to because it contains more than 150 words. Correction is required. See MPEP § 608.01(b).

***Claim Rejections - 35 USC § 112***

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-25 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Exemplary claim 1 analysis presented.

Claim 1 recites that "at least one of the rebate an discount is offered with at least one of the first and second bids".

However, the subsequent process steps are performed independent of whether the rebate or discount is offered with any of the received bids. Therefore, the role of this feature associated with the received bids is unclear, rendering the claims indefinite.

Similarly independent claims are also analyzed as being unclear and indefinite.

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Dependent claims inherit same deficiency as respective independent claims and are rejected accordingly.

### *Claim Rejections - 35 USC § 101*

#### 3. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

4. Claims 1-6, 8-18, 19-25 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

#### 3.1 Claims 1-6 and 8-18 not within "technological arts"

As an initial matter, the United States Constitution under Art. I, §8, cl. 8 gave Congress the power to "[p]romote the progress of science and useful arts, by securing for limited times to authors and inventors the exclusive right to their respective writings and discoveries". In carrying out this power, Congress authorized under 35 U.S.C. §101 a grant of a patent to "[w]hoever invents or discovers any new and useful process, machine, manufacture, or composition or matter, or any new and useful improvement thereof." Therefore, a fundamental premise is that a patent is a statutorily created vehicle for Congress to confer an exclusive right to the inventors for "inventions" that promote the progress of "science and the useful arts". The phrase "technological arts" has been created and used by the courts to

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offer another view of the term "useful arts". See *In re Musgrave*, 167 USPQ (BNA) 280 (CCPA 1970). Hence, the first test of whether an invention is eligible for a patent is to determine if the invention is within the "technological arts".

Further, despite the express language of §101, several judicially created exceptions have been established to exclude certain subject matter as being patentable subject matter covered by §101. These exceptions include "laws of nature", "natural phenomena", and "abstract ideas". See *Diamond v. Diehr*, 450, U.S. 175, 185, 209 USPQ (BNA) 1, 7 (1981). However, courts have found that even if an invention incorporates abstract ideas, such as mathematical algorithms, the invention may nevertheless be statutory subject matter if the invention as a whole produces a "useful, concrete and tangible result." See *State Street Bank & Trust Co. v. Signature Financial Group, Inc.* 149 F.3d 1368, 1973, 47 USPQ2d (BNA) 1596 (Fed. Cir. 1998).

This "two prong" test was evident when the Court of Customs and Patent Appeals (CCPA) decided an appeal from the Board of Patent Appeals and Interferences (BPAI). See *In re Toma*, 197 USPQ (BNA) 852 (CCPA 1978). In *Toma*, the court held that the recited mathematical algorithm did not render the claim as a whole non-statutory using the Freeman-Walter-Abele test as applied to *Gottschalk v. Benson*, 409 U.S. 63, 175 USPQ (BNA) 673 (1972). Additionally, the court decided separately on the issue of the "technological arts". The court developed a "technological arts" analysis:

The "technological" or "useful" arts inquiry must focus on whether the claimed subject matter...is statutory, not on whether the product of the claimed subject matter...is statutory, not on whether the prior art which the

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claimed subject matter purports to replace...is statutory, and not on whether the claimed subject matter is presently perceived to be an improvement over the prior art, e.g., whether it "enhances" the operation of a machine. In re Toma at 857.

In Toma, the claimed invention was a computer program for translating a source human language (e.g., Russian) into a target human language (e.g., English). The court found that the claimed computer implemented process was within the "technological art" because the claimed invention was an operation being performed by a computer within a computer.

In the present application, Claims 1-6, 8-18 have no connection to the technological arts. None of the steps indicate any connection to a computer or technology. As an example, with reference to claim 1, the steps of receiving a first bid and a second bid, assigning a first value..etc., .. transforming the first and second values.., could be performed manually by a person without any technological means. It can be similarly shown that all process steps of the dependent claims indicated above can also be performed without any technological implement. Therefore, the claims are directed towards non-statutory subject matter. To overcome this rejection the Examiner recommends that Applicant amend the claims to better clarify so as to render their scope within the technological art. In the instant application, amendment of claims such that the most significant process are performed by a computer would

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meet this requirement. It is also reminded that the preamble should clearly indicate that the claimed method is performed by a computer or is a computerized method.

### 3.2 State Street Bank & Trust Co. v. Signature Financial Group, Inc. (State Street)

State Street required that the claimed operation of the claimed invention be directed to a "useful, concrete and tangible result". Note that the State Street ruling did not address the "technological arts" requirement as discussed above.

Claims 1-16 and 19-25 are not limited to a "useful, concrete and tangible result".

The decision in State Street Bank & Trust Co. v. Signature Financial Group, Inc. never addressed this prong of the test. In State Street Bank & Trust Co., the court found that the "mathematical exception" using the Freeman-Walter-Abele test has little, if any, application to determining the presence of statutory subject matter but rather, statutory subject matter should be based on whether the operation produces a "useful, concrete and tangible result". See State Street Bank & Trust Co. at 1374. Furthermore, the court found that there was no "business method exception" since the court decisions that purported to create such exceptions were based on novelty or lack of enablement issues and not on statutory grounds. Therefore, the court held that "[w]hether the patent's claims are too broad to be patentable is not to be judged under § 101, but rather under §§ 102, 103 and 112." See State Street Bank & Trust Co. at 1377. Both of these analysis goes towards whether the claimed invention is non-statutory because of the presence of an abstract idea. Indeed, State Street abolished the Freeman-Walter-Abele test used in *Toma*. However, State Street never addressed the second part of the analysis,

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i.e., the "technological arts" test established in *Toma* because the invention in *State Street* (i.e., a computerized system for determining the year-end income, expense, and capital gain or loss for the portfolio) was already determined to be within the technological arts under the *Toma* test. This dichotomy has been recently acknowledged by the Board of Patent Appeals and Interferences (BPAI) in affirming a §101 rejection finding the claimed invention to be non-statutory. See *Ex parte Bowman*, 61 USPQ2d (BNA) 1669 (BdPatApp&Int 2001).

Considering the *State Street* ruling a determination is made whether present invention of (s) "transforms the first and second values to third and fourth values having a standard unit of measurement". However, there is no suggestion in the specification that a useful process occurs until the ranking associated with the third and fourth values are displayed in relation to each other. Since the claimed invention does not recite necessary steps to determine the ranking, it fails to produce a "useful, concrete and tangible result". In this regard, claim 1 is treated as nothing more than abstract idea.

Dependent claims 2-16 do not cure this deficiency.

System claims 19-24 and 25 also non-statutory under this test alone.

### 3.3 Claims 19-25 lack Utility

Claims 19-24 are rejected under 35 U.S.C. 101 because the disclosed invention is inoperative and therefore lacks utility.

Exemplary claim 19 recites a system having a plurality of



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elements, in the form of a database and computer executable codes (software). However, the system is rendered non-functional and inoperative because there is nothing in the claimed system to impart functionality of these elements. Note that functionality of the computer executable codes is realized only, when they are acted upon by a processor or a computing device. The system claim must include a computer which in communication with the database and the software (accessible by the computer processor) in order that the entire system can be a functional apparatus.

This deficiency is also present in each of the dependent claims 20-24.

Claim 25 recites non-functional data structure

Claim 25 is rejected under 35 USC § 101 because the claimed invention is directed to non-statutory subject matter. Claim 25 is directed to disembodied data structure which is per se is not statutory (*In re Warmerdam*, No. 93-1294 (Fed. Cir. August 11, 1994)). The examiner suggests to redraft the claims to include a computer-readable medium so that the claimed set of machine readable codes in combination with a computer-readable medium will be capable of producing a useful, concrete and tangible result. A claim to a computer-readable medium encoded with functional descriptive material that can function with a

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computer to effect a practical application that results in a useful, concrete and tangible result (i.e. executing a stock transaction or generating an investment portfolio) satisfies section 101. See U.S. Patent 5,710,578 to Beauregard et al.

***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 1-5, 7-15, 17-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over

VIRGINIA POWER TO SEEK 1,750 MW MORE THROUGH COMPETITIVE

BIDDING, Electric Utility Week, pg 15, March 14, 1998 (hereafter COMPETITIVE

BIDDING).

Per claim 1, COMPETITIVE BIDDING teaches a method of transformational bidding:

receiving a first bid from a first bidder and a second bid from a second bidder...:

assigning a first value and a first unit of measurement for the first bid and a second value and second unit of measurement for the second bid; and

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transforming the first and second values to third and fourth values, respectively, having a standard unit of measurement.

(proposals received from vendors are analyzed to select best proposals using a "four-factor bid-evaluation system", inherently this requires the receiving of bids from the respective bidders, assigning values to each bid with unit of measurement (e.g. dependable capacity and energy prices (Cents/kwh)) these are then transformed (in association with other three factors) to respective score of each bid, the score being measured in percentage).

The COMPETITIVE BIDDING however, fails to teach that at least one of a rebate and discount is offered with at least one of the first and second bids.

However, Official Notice is taken that offering discount with a bid is old and well known.

It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to have at least one of a rebate and discount offered with the bid because it would make the bid or proposal for the goods or service being offered to the buyer more competitive thereby improving the odds of winning the bid.

Claim 2: wherein the transforming comprises:  
determining a first transformation factor for the first value;

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determining a second transformation factor for the second value; and

converting the first value using the first transformation factor and the second value using the second transformation factor.

(see p.2 "70%" and "10%" are weights for transformation of different values associated with the first and second bids)

Claim 3: wherein the transforming comprises:

performing a linear transformation for the first and second values having at least one of a multiplicative adjustment and an additive adjustment.

(refer to four factor evaluation, each factor is assigned a selection weight to determine a resulting score. This translates into a mathematical formulation of linear transformation of the type:

$$\text{score} = A_i * w_1 + B_i * w_2 + C_i * w_3 + D_i * w_4$$

$w_1..w_4$  are transformation factors

$A_i$  through  $D_i$  are bid values associated with  $i$ th bid.)

Claim 4: The method of claim 2 wherein the transforming comprises:

multiplying the first value by the first transformation factor and the second value by the second transformation factor.

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(see claim 3 analysis).

Claim 5: The COMPETITIVE BIDDING fails to teach look-up table for the first and second transformation factors and However, Official Notice is taken that application of lookup table in computation is old and well known.

It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to have first and second transformation factors determined using a lookup table because it would facilitate assignment of the weight factors regardless of how they are used in calculation and it also facilitate an efficient programming where large number of bidders are involved.

Claim 6: not rejected over a prior art.

Claim 7 recites a method of electronic auction (over a communication network such as the Internet) wherein a plurality of bidders submit bids to an auction coordinator for goods and/or services.

However, Official Notice is taken that electronic auctions wherein a first and second bidders to an auction coordinator (third party performing auction process) are old and well known.

It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to have the first and second bidders electronically coupled to an auction coordinator to submit bidders as per claim 7. Motivation for this improvement is to improve efficiency and provide convenience to all participants involved.

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Claim 8 is inherently met by COMPETITIVE BIDDING since it allows more than two bidders (i.e. contractors) to bid for the service.

Claims 9-10: since the methodology of COMPETITIVE BIDDING is shown in the reverse auction (price is lowered to win the bid), the method is also applicable to a forward auction format because the scoring process is applicable to any auction to determine a successful bid.

Claim 11: soliciting potential bidders.

(inherent feature of "competitive bidding" for new power supplies)

Claim 12. wherein the soliciting comprises:

preparing a request for quotation; (RFP)

providing the request for quotation to potential bidders; (RFP)

and

requesting the potential bidders to respond to the request for quotation.

(..best proposals)

Claims 13 and 14. The method of claim 12 wherein the requesting comprises:

identifying goods to be purchased.

(inherent in competitive bidding because "the best proposals" submitted are result of the RFP)

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Claim 15: The method of claim 1 wherein the transforming comprises:

determining the standard unit of measurement according to a buyer comparative bid parameter.

(the percentage score is determined according to "Virginia Power" four-factor bid evaluation system).

Claim 16: not rejected over a prior art.

Claim 17 and 18: comparing the third and fourth values; and ranking the third value with respect to the fourth value. displaying the ranking to a buyer.

(inherent because the buyer evaluates the proposals and select the best proposal, see p.2)

Claims 19 and 25 have been analyzed as per claim 1 analysis because they recite limitations similar to claim 1.

System claim 19 requires that the claimed method be incorporated as a computerized system. Claim 25 requires that the method steps be embedded in a computer readable medium.

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Official notice is Official Notice is taken that such implementations of auction and bidding in electronic format are old and well known. (please refer to prior art considered relevant to this application).

It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to have the claimed method of transforming implemented as a computerized system and a computer readable to realize obvious benefits known in the art.

Claim 20 is analyzed per claim 5 and analysis provided for claim 19.

Per claims 21 and 22, COMPETITIVE BIDDING does not expressly show that the standard unit of measurement comprises a buyer comparative bid parameter. COMPETITIVE BIDDING further does not expressly show that the standard unit of measurement comprises a net present value.

However these differences are only found in the nonfunctional descriptive material and are not functionally involved in the steps recited. The transforming the bid information does not depend upon the units of measurement.

Thus, this descriptive material will not distinguish the claimed invention from the prior art in terms of patentability, see *In re Gulack*, 703 F.2d 1381, 1385, 217 USPQ 401, 404 (Fed.



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Cir. 1983), In re Lowry, 32 F.3d 1579, 32 USPQ2d 1031 (Fed. Cir. 1994).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to transform the bid information into values of any standard units of measure, because such data does not functionally relate to the steps in the method claimed and because the subjective interpretation of the data does not patentably distinguish the claimed invention.

Claims 23 and 24 are analyzed in accordance with analysis of claims 9 and 10 respectively.

### **Conclusion**

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

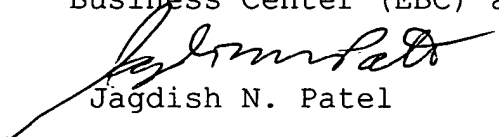
Any inquiry concerning this communication or earlier communications from the examiner should be directed to JAGDISH PATEL whose telephone number is (703)308-7837. The examiner can normally be reached on 800AM-600PM M-Th.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vincent Millin can be

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reached on (703)308-1065. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Jagdish N. Patel

(Primary Examiner, AU 3624)

12/13/04